



## Legislation Details (With Text)

**File #:** 1273-2014      **Version:** 1

**Type:** Ordinance      **Status:** Passed

**File created:** 5/23/2014      **In control:** Public Utilities Committee

**On agenda:** 7/21/2014      **Final action:** 7/23/2014

**Title:** To authorize the Director of Public Utilities to execute a planned contract modification for professional engineering and design services with ARCADIS U.S. Inc. in connection with the Wastewater Treatment Facilities Ash Lagoon Improvements and to expend up to \$18,100.00 from the Sanitary Sewers General Bond Fund, and authorize an amendment to the 2014 Capital Improvements Budget. (\$18,100.00)

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**Attachments:** 1. Ord 1273-2014 Mod #1 LEGISLATION B 042514, 2. Ord 1273-2014 Mod 1 Sub-Contractor Work Identification Form S

Date	Ver.	Action By	Action	Result
7/23/2014	1	CITY CLERK	Attest	
7/22/2014	1	MAYOR	Signed	
7/21/2014	1	COUNCIL PRESIDENT	Signed	
7/21/2014	1	Columbus City Council	Approved	Pass
7/14/2014	1	Columbus City Council	Read for the First Time	

### 1. Background:

This legislation authorizes the Director of Public Utilities to enter into an engineering modification agreement (Mod#1) with ARCADIS U.S. Inc., for the Wastewater Treatment Facilities Ash Lagoons Improvements. This professional services contract modification with ARCADIS U.S., Inc. will provide continuing professional engineering services for the Wastewater Treatment Facilities Ash Lagoons Improvements project, Project 650333-100000. Both the Jackson Pike (JPWWTP) and Southerly Wastewater Treatment Plants (SWWTP) have two biosolids multiple hearth incinerators. The ash produced is mixed with incinerator scrubber water and/or plant flushing water and was previously pumped to the two ash lagoons at each plant. There was a concern that decant draining off the ash lagoons would not meet the new copper limits of the NPDES permits at both plants. The Scope of Work for this project, at the City's discretion, originally consisted of the following elements:

A. This project was originally intended to investigate the construction of new ash lagoons that were to drain to the plant effluent for the purpose of diluting the copper concentrations of the ash decant to acceptable concentrations for release into the Scioto River, or to combine the existing ash lagoon decant with the treatment plants' effluents, or to recycle decant from the existing ash lagoons to plants' headworks for treatment.

#### B. Jackson Pike WWTP:

1. Study the structure of the Jackson Pike ash lagoons and investigate options to replace them or to provide new ash lagoon liners for both lagoons and construct a new ash flume or alternative ash conveyance system.

#### C. Southerly WWTP:

1. Investigate new, smaller ash storage and conveyance to be constructed out of the Scioto River floodway, due to floodway constraints.

However, a Business Case Evaluation (BCE) was performed. Early in the BCE process, an alternative to the originally-envisioned ash lagoon modifications or new lagoon construction was identified. An innovative alternative was proposed by the City's project committee to convey ash slurry into dewatering containers to transport dewatered incinerator ash directly to beneficial reuse, eliminating the need for lagoons and the need for storage and subsequent excavation of the ash from lagoons.

Pilot projects for the new system were started at both waste water treatment plants and continued during the BCE process. ARCADIS U.S. Inc. provided ash dewatering / transport system pilot project start-up and documentation preparation assistance, testing and evaluation services and administrative services. Components of the pilot projects were built by internal maintenance staff.

The Design Professional (DP) Detailed Design for the SWWTP system commenced during the pilot testing when it was demonstrated that the dewatering methodology worked and that the ash dewatering/transport system alternative would be the recommendation of the BCE report.

The DP performed services during Construction at SWWTP that included Technical Project Representation to interpret design requirements, to design modifications to the plant's pumping and conveyance system, and to provide direction for compliance with the project's technical requirements. Construction Management and Field Project Representation were performed by others.

#### **Modification Information:**

##### **1.1 Amount of additional funds to be expended: \$18,100.00**

Original Contract	\$310,648.00
Proposed Modification No. 1	<u>\$ 18,100.00</u>
CURRENT PROPOSED TOTAL	\$328,748.00

##### **1.2 Reasons additional goods/services could not be foreseen.**

This Contract Modification No. 1 was planned and anticipated, and so stated in the original contract's legislation.

##### **1.3 Reason other procurement processes are not used:**

The funding provided by this Contract Modification No. 1 is for continuation of the existing work of the contract. In so much as work was planned for and anticipated within the original procurement, it is not reasonable or cost effective to undertake a new procurement to acquire these services

##### **1.4 How cost of modification was determined:**

A cost proposal was provided by ARCADIS U.S. Inc. and reviewed by the Division of Sewerage and Drainage and was deemed acceptable. The cost of this contract modification is consistent with the direct labor, overhead, and profit rates established within the original proposal.

**2. Emergency Designation:** Emergency designation **is not** requested for this legislation.

**3. Contract Compliance No.:** 57-0373224 | MAJ | Expiration Date: 07/10/2015

#### **4. Economic Impact:**

The cost of this project was scaled down from an initial estimated capital cost of \$19,859,000.00 to design and construction expenditure levels to date of less than \$1,000,000.00. The innovative new ash dewatering and transportation process was designed, tested and built through cooperative skilled team interaction of City of Columbus personnel from all of the Division of Sewerage and Drainage facilities, and the DP. This project will enhance the beneficial reuse of incinerator ash by eliminating the need to handle and transport the ash multiple times; it will end the practice of storing

ash in or near the floodplain of the Scioto River, which will eventually end the downstream transport of ash during seasonal flooding events; it will eliminate the ash lagoon decant overflows directly into the Scioto River and instead will provide for WWTP processing of the incinerator ash decant flow, all in keeping with the spirit and the intent of the City of Columbus' Green Action Plan.

#### 5. Fiscal Impact:

This ordinance authorizes the expenditure of up to \$18,100.00 from the Sanitary Sewer General Bond Fund, Fund 664 and amends the 2014 Capital Improvements Budget.

To authorize the Director of Public Utilities to execute a planned contract modification for professional engineering and design services with ARCADIS U.S. Inc. in connection with the Wastewater Treatment Facilities Ash Lagoon Improvements and to expend up to \$18,100.00 from the Sanitary Sewers General Bond Fund, and authorize an amendment to the 2014 Capital Improvements Budget. (\$18,100.00)

**WHEREAS**, it is necessary to authorize a planned contract modification for professional engineering services with ARCADIS U.S. Inc. for the Division of Sewerage and Drainage for the Wastewater Treatment Facilities Ash Lagoon Improvements; and

**WHEREAS**, Contract No. EL011393 was authorized by Ordinance No. 1636-2010, passed by the Columbus City Council on January 24, 2011, executed by the Director of Public Utilities March 04, 2011, approved by the City Attorney on March 16, 2011 in the amount of \$310,648.00; and

**WHEREAS**, it is necessary to authorize the expenditure of \$18,100.00 in funds from the Sanitary Sewer General Bond Fund, Fund 664, for purposes of providing sufficient funding for the aforementioned project expenditure; and

**WHEREAS**, it is necessary to amend the 2014 Capital Improvements Budget to provide sufficient budget authority for the project expenditure; and

**WHEREAS**, the Division of Sewerage and Drainage, Department of Public Utilities is requesting that this Council authorize the Director of Public Utilities to enter into a contract modification agreement for professional engineering services with ARCADIS U.S. Inc. in connection with the Wastewater Treatment Facilities Ash Lagoon Improvements, at the earliest practicable date for the preservation of the public health, property, and safety; **Now, Therefore,**

#### **BE IT ORDAINED BY THE COUNCIL OF THE CITY OF COLUMBUS:**

**SECTION 1.** That the Director of Public Utilities be and hereby is authorized to modify Contract No. EL011393 with ARCADIS U.S. Inc., 100 E. Campus View Blvd., Suite 200, Columbus, Ohio 43235 for professional engineering services in connection with the Wastewater Treatment Facilities Ash Lagoon Improvements project in accordance with the terms and conditions as shown in the original contract on file in the office of the Division of Sewerage and Drainage.

**SECTION 2.** That the Director of Public Utilities is authorized to expend up to \$18,100.00 or as much thereof as may be needed, on the following:

**Project No. | Project Name | Amount (\$) | OCA Code | Object Level Three**

650333-100000 | Wastewater Treatment Facilities Ash Lagoons | 664333 | 6676 | \$18,100.00

**SECTION 3.** That the 2014 Capital Improvements Budget is hereby amended as follows:

**Fund No. | Proj. No. | Proj. Name | Current Authority | Revised Authority | Change**

Creation of authority to match cash - only using \$18,100

664 | 650333-100000 | WWTF Ash Lagoons Improvements | \$260,860 | \$380,360 | (+\$119,500)

**SECTION 4.** That the said company, ARCADIS U.S. Inc. shall perform the work to the satisfaction of the Director of Public Utilities and the Administrator of the Division of Sewerage and Drainage.

**SECTION 5.** That the funds necessary to carry out the purpose of this ordinance are hereby deemed appropriated, and the City Auditor shall establish such accounting codes as necessary.

**SECTION 6.** That the City Auditor is authorized to make any accounting changes to revise the funding source for all contracts or contract modifications associated with this Ordinance.

**SECTION 7.** That the Director of Public Utilities is hereby authorized to transfer any unencumbered balance in the project account to the unallocated balance within the same fund upon receipt of certification by the Director of the Department administering said project that the project has been completed and the monies are no longer required for said project; except that no transfer shall be made from a project by monies from more than one source.

**SECTION 8.** That this ordinance shall take effect and be in force from and after the earliest period allowed by law.